Sequence Table

<110> Kainoh, Mie

Tanaka, Toshiaki

<120> Chimeric proteins, their heterodimer complexes, and platelet substitutes

<130> 1102-98

<141> 1998-09-29

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<160> 31

<170> Wordperfect 5.1

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<211> 4228

<212> DNA

<213> Homo sapien

<220>

<221> CDS

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Gly	Pro	Glu	Ala	Ala	Leu	Arg	Glu	Thr	Val	Met	Leu	Leu	Leu	Cys	Leu	
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Leu	Tyr	Gln	Gly	Pro	His	Ans	Thr	Leu	Phe	Gly	Tyr	Ser	Val	Val	Leu	

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Asn   Trp   Leu   Ala   Asn   Ala   Ser   Val   Ile   Asn   Pro   Gly   Ala   Ile   Tyr   Arg
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Cys   Arg   Ile   Gly   Lys   Asn   Pro   Gly   Gln   Thr   Cys   Glu   Gln   Leu   Gln   Leu
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Gly   Ser   Pro   Asn   Gly   Glu   Pro   Cys   Gly   Lys   Thr   Cys   Leu   Glu   Glu   Arg
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Asp	Asn	Asp	Gly	Phe	Glu	Asp	Val	Ala	Ile	Gly	Ala	Pro	Gln	Glu	Asp	

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His   Ala   Thr   Cys   Glu   Asn   Glu   Glu   Glu   Met   Asp   Asn   Leu   Lys   His   Ser
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Asn   Glu   Pro   Glu   Thr   Cys   Met   Val   Glu   Lys   Met   Asn   Leu   Thr   Phe   His
                          765                           770                          775
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Val   Ile   Asn   Thr   Gly   Asn   Ser   Met   Ala   Pro   Asn   Val   Ser   Val   Glu   Ile
                          780                           785                          790
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Met   Val   Pro   Asn   Ser   Phe   Ser   Pro   Gln   Thr   Asp   Lys   Leu   Phe   Asn   Ile
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Leu   Asp   Val   Gln   Thr   Thr   Thr   Gly   Glu   Cys   His   Phe   Glu   Asn   Tyr   Gln
810                           815                           820                          825
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Met   Glu   Ser   Gly   Lys   Glu   Ala   Ser   Val   His   Ile   Gln   Leu   Glu   Gly   Arg

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Met   Ile   Ser   Arg   Thr   Pro   Glu   Val   Thr   Cys   Val   Val   Val   Asp   Val   Ser
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His   Glu   Asp   Pro   Glu   Val   Lys   Phe   Asn   Trp   Tyr   Val   Asp   Gly   Val   Glu
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gtg   cat   aat   gcc   aag   aca   aag   ccg   cgg   gag   gag   cag   tac   aac   agc   acg   3685
Val   His   Asn   Ala   Lys   Thr   Lys   Pro   Arg   Glu   Glu   Gln   Tyr   Asn   Ser   Thr
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Tyr   Arg   Val   Val   Ser   Val   Leu   Thr   Val   Leu   His   Gln   Asp   Trp   Leu   Asn
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                                                1075                        1080
ccc   cca   tcc   cgg   gat   gag   ctg   acc   aag   aac   cag   gtc   agc   ctg   acc   tgc   3985
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-20               -15                     -10                     -5

tgt   gtg   ttt   gct   caa   aca   gat   gaa   aat   aga   tgt   tta   aaa   gca   aat   gcc   96
Cys   Val   Phe   Ala   Gln   Thr   Asp   Glu   Asn   Arg   Cys   Leu   Lys   Ala   Asn   Ala
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aaa   tca   tgt   gga   gaa   tgt   ata   caa   gca   ggg   cca   aat   tgt   ggg   tgg   tgc   144
Lys   Ser   Cys   Gly   Glu   Cys   Ile   Gln   Ala   Gly   Pro   Asn   Cys   Gly   Trp   Cys
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aca   aat   tca   aca   ttt   tta   cag   gaa   gga   atg   cct   act   tct   gca   cga   tgt   192
Thr   Asn   Ser   Thr   Phe   Leu   Gln   Glu   Gly   Met   Pro   Thr   Ser   Ala   Arg   Cys
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gat   gat   tta   gaa   gcc   tta   aaa   aag   aag   ggt   tgc   cct   cca   gat   gac   ata   240
Asp   Asp   Leu   Glu   Ala   Leu   Lys   Lys   Lys   Gly   Cys   Pro   Pro   Asp   Asp   Ile
45                      50                      55                      60

gaa   aat   ccc   aga   ggc   tcc   aaa   gat   ata   aag   aaa   aat   aaa   aat   gta   acc   288
Glu   Asn   Pro   Arg   Gly   Ser   Lys   Asp   Ile   Lys   Lys   Asn   Lys   Asn   Val   Thr
                        65                      70                      75

aac   cgt   agc   aaa   gga   aca   gca   gag   aag   ctc   aag   cca   gag   gat   att   cat   336
Asn   Arg   Ser   Lys   Gly   Thr   Ala   Glu   Lys   Leu   Lys   Pro   Glu   Asp   Ile   His
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cag   atc   caa   cca   cag   cag   ttg   gtt   ttg   cga   tta   aga   tca   ggg   gag   cca   384
Gln   Ile   Gln   Pro   Gln   Gln   Leu   Val   Leu   Arg   Leu   Arg   Ser   Gly   Glu   Pro
                  95                      100                     105

cag   aca   ttt   aca   tta   aaa   ttc   aag   aga   gct   gaa   gac   tat   ccc   att   gac   432
Gln   Thr   Phe   Thr   Leu   Lys   Phe   Lys   Arg   Ala   Glu   Asp   Tyr   Pro   Ile   Asp
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act   tcg   gac   ttc   aga   att   gga   ttt   ggc   tca   ttt   gtg   gaa   aag   act   gtg   576
Thr   Ser   Asp   Phe   Arg   Ile   Gly   Phe   Gly   Ser   Phe   Val   Glu   Lys   Thr   Val
                         160                        165                          170
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Met   Pro   Tyr   Ile   Ser   Thr   Thr   Pro   Ala   Lys   Leu   Arg   Asn   Pro   Cys   Thr
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agt   gaa   cag   aac   tgc   acc   acc   cca   ttt   agc   tac   aaa   aat   gtg   ctc   agt   672
Ser   Glu   Gln   Asn   Cys   Thr   Thr   Pro   Phe   Ser   Tyr   Lys   Asn   Val   Leu   Ser
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Leu   Thr   Asn   Lys   Gly   Glu   Val   Phe   Asn   Glu   Leu   Val   Gly   Lys   Gln   Arg
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ata   tct   gga   aat   ttg   gat   tct   cca   gaa   ggt   ggt   ttc   gat   gcc   atc   atg   768
Ile   Ser   Gly   Asn   Leu   Asp   Ser   Pro   Glu   Gly   Gly   Phe   Asp   Ala   Ile   Met
                         225                        230                          235
caa   gtt   gca   gtt   tgt   gga   tca   ctg   att   ggc   tgg   agg   aat   gtt   aca   cgg   816
Gln   Val   Ala   Val   Cys   Gly   Ser   Leu   Ile   Gly   Trp   Arg   Asn   Val   Thr   Arg
                         240                        245                          250
ctg   ctg   gtg   ttt   tcc   aca   gat   gcc   ggg   ttt   cac   ttt   gct   gga   gat   ggg   864
Leu   Leu   Val   Phe   Ser   Thr   Asp   Ala   Gly   Phe   His   Phe   Ala   Gly   Asp   Gly
                         255                        260                          265
aaa   ctt   ggt   ggc   att   gtt   tta   cca   aat   gat   gga   caa   tgt   cac   ctg   gaa   912
Lys   Leu   Gly   Gly   Ile   Val   Leu   Pro   Asn   Asp   Gly   Gln   Cys   His   Leu   Glu
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aat   aat   atg   tac   aca   atg   agc   cat   tat   tat   gat   tat   cct   tct   att   gct   960
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His   Leu   Val   Gln   Lys   Leu   Ser   Glu   Asn   Asn   Ile   Gln   Thr   Ile   Phe   Ala
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Gln	Leu	Ile	Ile	Asp	Ala	Tyr	Asn	Ser	Leu	Ser	Ser	Glu	Val	Ile	Leu	

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                           545                          550                          555
cgt   gtg   tgt   gag   tgc   aac   ccc   aac   tac   act   ggc   agt   gca   tgt   gac   tgt   1776
Arg   Val   Cys   Glu   Cys   Asn   Pro   Asn   Tyr   Thr   Gly   Ser   Ala   Cys   Asp   Cys

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               590                          595                          600
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                           625                          630                          635
aag   aaa   gac   aca   tgc   aca   cag   gaa   tgt   tcc   tat   ttt   aac   att   acc   aag   2016
Lys   Lys   Asp   Thr   Cys   Thr   Gln   Glu   Cys   Ser   Tyr   Phe   Asn   Ile   Thr   Lys

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Ser   His   Cys   Lys   Glu   Lys   Asp   Val   Asp   Asp   Cys   Trp   Phe   Tyr   Phe   Thr

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ggg	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	cca	aaa	ccc	aag	gac	acc	ctc	2776
Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	
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cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	gtg	gac	ggc	gtg	gag	2872
His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	
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Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	
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Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	
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Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	
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				-25					-20				-15			

tta	gcg	ctc	agt	caa	ggc	att	tta	aat	tgt	tgt	ttg	gcc	tac	aat	gtt	96
Leu	Ala	Leu	Ser	Gln	Gly	Ile	Leu	Asn	Cys	Cys	Leu	Ala	Tyr	Asn	Val	
			-10					-5					1			

ggt	ctc	cca	gaa	gca	aaa	ata	ttt	tcc	ggt	cct	tca	agt	gaa	cag	ttt	114
Gly	Leu	Pro	Glu	Ala	Lys	Ile	Phe	Ser	Gly	Pro	Ser	Ser	Glu	Gln	Phe	
	5					10					15					

ggg	tat	gca	gtg	cag	cag	ttt	ata	aat	cca	aaa	ggc	aac	tgg	tta	ctg	192
Gly	Tyr	Ala	Val	Gln	Gln	Phe	Ile	Asn	Pro	Lys	Gly	Asn	Trp	Leu	Leu	
20					25					30					35	

gtt	ggt	tca	ccc	tgg	agt	ggc	ttt	cct	gag	aac	cga	atg	gga	gat	gtg	240
Val	Gly	Ser	Pro	Trp	Ser	Gly	Phe	Pro	Glu	Asn	Arg	Met	Gly	Asp	Val	
				40					45					50		

tat	aaa	tgt	cct	gtt	gac	cta	tcc	act	gcc	aca	tgt	gaa	aaa	cta	aat	288
Tyr	Lys	Cys	Pro	Val	Asp	Leu	Ser	Thr	Ala	Thr	Cys	Glu	Lys	Leu	Asn	
		55						60				65				

ttg	caa	act	tca	aca	agc	att	cca	aat	gtt	act	gag	atg	aaa	acc	aac	336
Leu	Gln	Thr	Ser	Thr	Ser	Ile	Pro	Asn	Val	Thr	Glu	Met	Lys	Thr	Asn	
		70					75					80				

atg	agc	ctc	ggc	ttg	atc	ctc	acc	agg	aac	atg	gga	act	gga	ggt	ttt	384
Met	Ser	Leu	Gly	Leu	Ile	Leu	Thr	Arg	Asn	Met	Gly	Thr	Gly	Gly	Phe	
	85					90					95					

ctc	aca	tgt	ggt	cct	ctg	tgg	gca	cag	caa	tgt	ggg	aat	cag	tat	tac	432
Leu	Thr	Cys	Gly	Pro	Leu	Trp	Ala	Gln	Gln	Cys	Gly	Asn	Gln	Tyr	Tyr	
100					105					110					115	

aca	acg	ggt	gtg	tgt	tct	gac	atc	agt	cct	gat	ttt	cag	ctc	tca	gcc	480
Thr	Thr	Gly	Val	Cys	Ser	Asp	Ile	Ser	Pro	Asp	Phe	Gln	Leu	Ser	Ala	
			120					125					130			

agc	ttc	tca	cct	gca	act	cag	ccc	tgc	cct	tcc	ctc	ata	gat	gtt	gtg	528
Ser	Phe	Ser	Pro	Ala	Thr	Gln	Pro	Cys	Pro	Ser	Leu	Ile	Asp	Val	Val	
		135						140				145				

gtt	gtg	tgt	gat	gaa	tca	aat	agt	att	tat	cct	tgg	gat	gca	gta	aag	576
Val	Val	Cys	Asp	Glu	Ser	Asn	Ser	Ile	Tyr	Pro	Trp	Asp	Ala	Val	Lys	
		150					155					160				

aat	ttt	ttg	gaa	aaa	ttt	gta	caa	ggc	ctt	gat	ata	ggc	ccc	aca	aag	624

Asn	Phe	Leu	Glu	Lys	Phe	Val	Gln	Gly	Leu	Asp	Ile	Gly	Pro	Thr	Lys	
	165					170					175					
aca	cag	gtg	ggg	tta	att	cag	tat	gcc	aat	aat	cca	aga	gtt	gtg	ttt	672
Thr	Gln	Val	Gly	Leu	Ile	Gln	Tyr	Ala	Asn	Asn	Pro	Arg	Val	Val	Phe	
180					185					190					195	
aac	ttg	aac	aca	tat	aaa	acc	aaa	gaa	gaa	atg	att	gta	gca	aca	tcc	720
Asn	Leu	Asn	Thr	Tyr	Lys	Thr	Lys	Glu	Glu	Met	Ile	Val	Ala	Thr	Ser	
				200					205					210		
cag	aca	tcc	caa	tat	ggt	ggg	gac	ctc	aca	aac	aca	ttc	gga	gca	att	768
Gln	Thr	Ser	Gln	Tyr	Gly	Gly	Asp	Leu	Thr	Asn	Thr	Phe	Gly	Ala	Ile	
			215					220					225			
caa	tat	gca	aga	aaa	tat	gcc	tat	tca	gca	gct	tct	ggt	ggg	cga	cga	816
Gln	Tyr	Ala	Arg	Lys	Tyr	Ala	Tyr	Ser	Ala	Ala	Ser	Gly	Gly	Arg	Arg	
		230					235					240				
agt	gct	acg	aaa	gta	atg	gta	gtt	gta	act	gac	ggt	gaa	tca	cat	gat	864
Ser	Ala	Thr	Lys	Val	Met	Val	Val	Val	Thr	Asp	Gly	Glu	Ser	His	Asp	
	245					250					255					
ggt	tca	atg	ttg	aaa	gct	gtg	att	gat	caa	tgc	aac	cat	gac	aat	ata	912
Gly	Ser	Met	Leu	Lys	Ala	Val	Ile	Asp	Gln	Cys	Asn	His	Asp	Asn	Ile	
260					265					270					275	
ctg	agg	ttt	ggc	ata	gca	gtt	ctt	ggg	tac	tta	aac	aga	aac	gcc	ctt	960
Leu	Arg	Phe	Gly	Ile	Ala	Val	Leu	Gly	Tyr	Leu	Asn	Arg	Asn	Ala	Leu	
				280					285					290		
gat	act	aaa	aat	tta	ata	aaa	gaa	ata	aaa	gcg	atc	gct	agt	att	cca	1008
Asp	Thr	Lys	Asn	Leu	Ile	Lys	Glu	Ile	Lys	Ala	Ile	Ala	Ser	Ile	Pro	
			295					300					305			
aca	gaa	aga	tac	ttt	ttc	aat	gtg	tct	gat	gaa	gca	gct	cta	cta	gaa	1056
Thr	Glu	Arg	Tyr	Phe	Phe	Asn	Val	Ser	Asp	Glu	Ala	Ala	Leu	Leu	Glu	
		310					315					320				
aag	gct	ggg	aca	tta	gga	gaa	caa	att	ttc	agc	att	gaa	ggt	act	gtt	1104
Lys	Ala	Gly	Thr	Leu	Gly	Glu	Gln	Ile	Phe	Ser	Ile	Glu	Gly	Thr	Val	
	325					330					335					
caa	gga	gga	gac	aac	ttt	cag	atg	gaa	atg	tca	caa	gtg	gga	ttc	agt	1152
Gln	Gly	Gly	Asp	Asn	Phe	Gln	Met	Glu	Met	Ser	Gln	Val	Gly	Phe	Ser	
340					345					350					355	
gca	gat	tac	tct	tct	caa	aat	gat	att	ctg	atg	ctg	ggt	gca	gtg	gga	1200
Ala	Asp	Tyr	Ser	Ser	Gln	Asn	Asp	Ile	Leu	Met	Leu	Gly	Ala	Val	Gly	
			360					365					370			
gct	ttt	ggc	tgg	agt	ggg	acc	att	gtc	cag	aag	aca	tct	cat	ggc	cat	1248
Ala	Phe	Gly	Trp	Ser	Gly	Thr	Ile	Val	Gln	Lys	Thr	Ser	His	Gly	His	
		375					380					385				
ttg	atc	ttt	cct	aaa	caa	gcc	ttt	gac	caa	att	ctg	cag	gac	aga	aat	1296

Leu Ile Phe Pro Lys Gln Ala Phe Asp Gln Ile Leu Gln Asp Arg Asn
          390   395   400

cac agt tca tat tta ggt tac tct gtg gct gca att tct act gga gaa   1344
His Ser Ser Tyr Leu Gly Tyr Ser Val Ala Ala Ile Ser Thr Gly Glu
     405   410   415

agc act cac ttt gtt gct ggt gct cct cgg gca aat tat acc ggc cag   1392
Ser Thr His Phe Val Ala Gly Ala Pro Arg Ala Asn Tyr Thr Gly Gln
420   425   430   435

ata gtg cta tat agt gtg aat gag aat ggc aat atc acg gtt att cag   1440
Ile Val Leu Tyr Ser Val Asn Glu Asn Gly Asn Ile Thr Val Ile Gln
                    440   445   450

gct cac cga ggt gac cag att ggc tcc tat ttt ggt agt gtg ctg tgt   1488
Ala His Arg Gly Asp Gln Ile Gly Ser Tyr Phe Gly Ser Val Leu Cys
               455   460   465

tca gtt gat gtg gat aaa gac acc att aca gac gtg ctc ttg gta ggt   1536
Ser Val Asp Val Asp Lys Asp Thr Ile Thr Asp Val Leu Leu Val Gly
          470   475   480

gca cca atg tac atg agt gac cta aag aaa gag gaa gga aga gtc tac   1584
Ala Pro Met Tyr Met Ser Asp Leu Lys Lys Glu Glu Gly Arg Val Tyr
          485   490   495

ctg ttt act atc aaa aag ggc att ttg ggt cag cac caa ttt ctt gaa   1632
Leu Phe Thr Ile Lys Lys Gly Ile Leu Gly Gln His Gln Phe Leu Glu
500   505   510   515

ggc ccc gag ggc att gaa aac act cga ttt ggt tca gca att gca gct   1680
Gly Pro Glu Gly Ile Glu Asn Thr Arg Phe Gly Ser Ala Ile Ala Ala
                    520   525   530

ctt tca gac atc aac atg gat ggc ttt aat gat gtg att gtt ggt tca   1728
Leu Ser Asp Ile Asn Met Asp Gly Phe Asn Asp Val Ile Val Gly Ser
          535   540   545

cca cta gaa aat cag aat tct gga gct gta tac att tac aat ggt cat   1776
Pro Leu Glu Asn Gln Asn Ser Gly Ala Val Tyr Ile Tyr Asn Gly His
          550   555   560

cag ggc act atc cgc aca aag tat tcc cag aaa atc ttg gga tcc gat   1824
Gln Gly Thr Ile Arg Thr Lys Tyr Ser Gln Lys Ile Leu Gly Ser Asp
          565   570   575

gga gcc ttt agg agc cat ctc cag tac ttt ggg agg tcc ttg gat ggc   1872
Gly Ala Phe Arg Ser His Leu Gln Tyr Phe Gly Arg Ser Leu Asp Gly
580   585   590   595

tat gga gat tta aat ggg gat tcc atc acc gat gtg tct att ggt gcc   1920
Tyr Gly Asp Leu Asn Gly Asp Ser Ile Thr Asp Val Ser Ile Gly Ala
                    600   605   610

ttt gga caa gtg gtt caa ctc tgg tca caa agt att gct gat gta gct   1968

Phe	Gly	Gln	Val	Val	Gln	Leu	Trp	Ser	Gln	Ser	Ile	Ala	Asp	Val	Ala	
			615					620					625			
ata	gaa	gct	tca	ttc	aca	cca	gaa	aaa	atc	act	ttg	gtc	aac	aag	aat	2016
Ile	Glu	Ala	Ser	Phe	Thr	Pro	Glu	Lys	Ile	Thr	Leu	Val	Asn	Lys	Asn	
		630					635					640				
gct	cag	ata	att	ctc	aaa	ctc	tgc	ttc	agt	gca	aag	ttc	aga	cct	act	2064
Ala	Gln	Ile	Ile	Leu	Lys	Leu	Cys	Phe	Ser	Ala	Lys	Phe	Arg	Pro	Thr	
	645					650					655					
aag	caa	aac	aat	caa	gtg	gcc	att	gta	tat	aac	atc	aca	ctt	gat	gca	2112
Lys	Gln	Asn	Asn	Gln	Val	Ala	Ile	Val	Tyr	Asn	Ile	Thr	Leu	Asp	Ala	
660					665					670					675	
gat	gga	ttt	tca	tcc	aga	gta	acc	tcc	agg	ggg	tta	ttt	aaa	gaa	aac	2160
Asp	Gly	Phe	Ser	Ser	Arg	Val	Thr	Ser	Arg	Gly	Leu	Phe	Lys	Glu	Asn	
				680					685					690		
aat	gaa	agg	tgc	ctg	cag	aag	aat	atg	gta	gta	aat	caa	gca	cag	agt	2208
Asn	Glu	Arg	Cys	Leu	Gln	Lys	Asn	Met	Val	Val	Asn	Gln	Ala	Gln	Ser	
			695					700					705			
tgc	ccc	gag	cac	atc	att	tat	ata	cag	gag	ccc	tct	gat	gtt	gtc	aac	2256
Cys	Pro	Glu	His	Ile	Ile	Tyr	Ile	Gln	Glu	Pro	Ser	Asp	Val	Val	Asn	
		710					715					720				
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Ser	Leu	Asp	Leu	Arg	Val	Asp	Ile	Ser	Leu	Glu	Asn	Pro	Gly	Thr	Ser	
	725					730					735					
cct	gcc	ctt	gaa	gcc	tat	tct	gag	act	gcc	aag	gtc	ttc	agt	att	cct	2352
Pro	Ala	Leu	Glu	Ala	Tyr	Ser	Glu	Thr	Ala	Lys	Val	Phe	Ser	Ile	Pro	
740					745					750					755	
ttc	cac	aaa	gac	tgt	ggt	gag	gat	gga	ctt	tgc	att	tct	gat	cta	gtc	2400
Phe	His	Lys	Asp	Cys	Gly	Glu	Asp	Gly	Leu	Cys	Ile	Ser	Asp	Leu	Val	
				760					765					770		
cta	gat	gtc	cga	caa	ata	cca	gct	gct	caa	gaa	caa	ccc	ttt	att	gtc	2448
Leu	Asp	Val	Arg	Gln	Ile	Pro	Ala	Ala	Gln	Glu	Gln	Pro	Phe	Ile	Val	
		775					780					785				
agc	aac	caa	aac	aaa	agg	tta	aca	ttt	tca	gta	aca	ctg	aaa	aat	aaa	2496
Ser	Asn	Gln	Asn	Lys	Arg	Leu	Thr	Phe	Ser	Val	Thr	Leu	Lys	Asn	Lys	
		790					795					800				
agg	gaa	agt	gca	tac	aac	act	gga	att	gtt	gtt	gat	ttt	tca	gaa	aac	2544
Arg	Glu	Ser	Ala	Tyr	Asn	Thr	Gly	Ile	Val	Val	Asp	Phe	Ser	Glu	Asn	
	805					810					815					
ttg	ttt	ttt	gca	tca	ttc	tcc	cta	ccg	gtt	gat	ggg	aca	gaa	gta	aca	2592
Leu	Phe	Phe	Ala	Ser	Phe	Ser	Leu	Pro	Val	Asp	Gly	Thr	Glu	Val	Thr	
820					825					830					835	
tgc	cag	gtg	gct	gca	tct	cag	aag	tct	gtt	gcc	tgc	gat	gta	ggc	tac	2640

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        Cys   Gln   Val   Ala   Ala   Ser   Gln   Lys   Ser   Val   Ala   Cys   Asp   Val   Gly   Tyr
                          840                           845                           850

        cct   gct   tta   aag   aga   gaa   caa   cag   gtg   act   ttt   act   att   aac   ttt   gac   2688
        Pro   Ala   Leu   Lys   Arg   Glu   Gln   Gln   Val   Thr   Phe   Thr   Ile   Asn   Phe   Asp
                          855                           860                           865

        ttc   aat   ctt   caa   aac   ctt   cag   aat   cag   gcg   tct   ctc   agt   ttc   caa   gcc   2736
        Phe   Asn   Leu   Gln   Asn   Leu   Gln   Asn   Gln   Ala   Ser   Leu   Ser   Phe   Gln   Ala
                          870                           875                           880

        tta   agt   gaa   agc   caa   gaa   gaa   aac   aag   gct   gat   aat   ttg   gtc   aac   ctc   2784
        Leu   Ser   Glu   Ser   Gln   Glu   Glu   Asn   Lys   Ala   Asp   Asn   Leu   Val   Asn   Leu
                          885                           890                           895

        aaa   att   cct   ctc   ctg   tat   gat   gct   gaa   att   cac   tta   aca   aga   tct   acc   2832
        Lys   Ile   Pro   Leu   Leu   Tyr   Asp   Ala   Glu   Ile   His   Leu   Thr   Arg   Ser   Thr
        900                           905                           910                           915

        aac   ata   aat   ttt   tat   gaa   atc   tct   tcg   gat   ggg   aat   gtt   cct   tca   atc   2880
        Asn   Ile   Asn   Phe   Tyr   Glu   Ile   Ser   Ser   Asp   Gly   Asn   Val   Pro   Ser   Ile
                          920                           925                           930

        gtg   cac   agt   ttt   gaa   gat   gtt   ggt   cca   aaa   ttc   atc   ttc   tcc   ctg   aag   2928
        Val   His   Ser   Phe   Glu   Asp   Val   Gly   Pro   Lys   Phe   Ile   Phe   Ser   Leu   Lys
                          935                           940                           945

        gta   aca   aca   gga   agt   gtt   cca   gta   agc   atg   gca   act   gta   atc   atc   cac   2976
        Val   Thr   Thr   Gly   Ser   Val   Pro   Val   Ser   Met   Ala   Thr   Val   Ile   Ile   His
                          950                           955                           960

        atc   cct   cag   tat   acc   aaa   gaa   aag   aac   cca   ctg   atg   tac   cta   act   ggg   3024
        Ile   Pro   Gln   Tyr   Thr   Lys   Glu   Lys   Asn   Pro   Leu   Met   Tyr   Leu   Thr   Gly
              965                           970                           975

        gtg   caa   aca   gac   aag   gct   ggt   gac   atc   agt   tgt   aat   gca   gat   atc   aat   3072
        Val   Gln   Thr   Asp   Lys   Ala   Gly   Asp   Ile   Ser   Cys   Asn   Ala   Asp   Ile   Asn
        980                           985                           990                           995

        cca   ctg   aaa   ata   gga   caa   aca   tct   tct   tct   gta   tct   ttc   aaa   agt   gaa   3120
        Pro   Leu   Lys   Ile   Gly   Gln   Thr   Ser   Ser   Ser   Val   Ser   Phe   Lys   Ser   Glu
                          1000                          1005                          1010

        aat   ttc   agg   cac   acc   aaa   gaa   ttg   aac   tgc   aga   act   gct   tcc   tgt   agt   3168
        Asn   Phe   Arg   His   Thr   Lys   Glu   Leu   Asn   Cys   Arg   Thr   Ala   Ser   Cys   Ser
                          1015                          1020                          1025

        aat   gtt   acc   tgc   tgg   ttg   aaa   gac   gtt   cac   atg   aaa   gga   gaa   tac   ttt   3216
        Asn   Val   Thr   Cys   Trp   Leu   Lys   Asp   Val   His   Met   Lys   Gly   Glu   Tyr   Phe
                          1030                          1035                          1040

        gtt   aat   gtg   act   acc   aga   att   tgg   aac   ggg   act   ttc   gca   tca   tca   acg   3264
        Val   Asn   Val   Thr   Thr   Arg   Ile   Trp   Asn   Gly   Thr   Phe   Ala   Ser   Ser   Thr
        1045                          1050                          1055

        ttc   cag   aca   gta   cag   cta   acg   gca   gct   gca   gaa   atc   aac   acc   tat   aac   3312
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Phe	Gln	Thr	Val	Gln	Leu	Thr	Ala	Ala	Ala	Glu	Ile	Asn	Thr	Tyr	Asn
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cct	gag	ata	tat	gtg	att	gaa	gat	aac	act	gtt	acg	att	ccc	ctg	atg	3360
Pro	Glu	Ile	Tyr	Val	Ile	Glu	Asp	Asn	Thr	Val	Thr	Ile	Pro	Leu	Met	
				1080					1085					1090		

ata	atg	aaa	cct	gat	gag	aaa	gcc	gaa	gta	cca	aca	gat	ccc	gag	3405
Ile	Met	Lys	Pro	Asp	Glu	Lys	Ala	Glu	Val	Pro	Thr	Asp	Pro	Glu	
			1095					1100					1105		

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gctcagggag	agggtcttct	ggctttttcc	caggctctgg	gcaggcacag	gctaggtgcc	3585
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cagctcggac	accttctctc	ctcccagatt	ccagtaactc	ccaatcttct	ctctgca	3762

gag	ccc	aaa	tct	tgt	gac	aaa	act	cac	aca	tgc	cca	ccg	tgc	cca	3807
Glu	Pro	Lys	Ser	Cys	Asp	Lys	Thr	His	Thr	Cys	Pro	Pro	Cys	Pro	
		1110					1115					1120			

ggtaagccag	cccaggcctc	gccctccagc	tcaaggcggg	acaggtgccc	tagagtagcc	3867
tgcatccagg	gacaggcccc	agccgggtgc	tgacacgtcc	acctccatct	cttcctca	3925

gca	cct	gaa	ctc	ctg	ggg	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	cca	aaa	3973
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	
				1125					1130					1135		

ccc	aag	gac	acc	ctc	atg	atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	4021
Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	
		1140					1145					1150				

gtg	gtg	gac	gtg	agc	cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	4069
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	
	1155					1160					1165					

gtg	gac	ggc	gtg	gag	gtg	cat	aat	gcc	aag	aca	aag	ccg	cgg	gag	gag	4117
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	
1170					1175					1180					1185	

cag	tac	aac	agc	acg	tac	cgg	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	4165
Gln	Tyr	Asn	Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	
			1190					1195					1200			

cag	gac	tgg	ctg	aat	ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc	aac	aaa	4213
Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	
		1205					1210					1215				

gcc	ctc	cca	gcc	ccc	atc	gag	aaa	acc	atc	tcc	aaa	gcc	aaa	4255
Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	
		1220					1225					1230		

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cctgagagtg	accgctgtac	caacctctgt	cctaca			ggg	cag	ccc	cga	gaa	cca	4369

										Gly	Gln	Pro	Arg	Glu	Pro	
													1235			
cag	gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	acc	aag	aac	cag	4417
Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	
		1240					1245					1250				
gtc	agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	atc	gcc	4465
Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	
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Val	Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	
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cct	ccc	gtg	ctg	gat	tcc	gac	ggc	tcc	ttc	ttc	ctc	tac	agc	aag	ctc	4561
Pro	Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	
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acc	gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	tgc	tcc	4609
Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	
			1305					1310					1315			
gtg	atg	cat	gag	gct	ctg	cac	aac	cac	tac	acg	cag	aag	agc	ctc	tcc	4657
Val	Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	
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Leu	Ser	Pro	Gly	Lys												
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